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ABSTRACT

There is at present an unusually high degree of interest among educators and educational policy makers in the possibilities of improving and expanding elementary and secondary education by incorporating some forms of distance education into traditional schooling. However, no procedures and little funding have been provided for research to find out what issues states consider important, what policies they have implemented or intend to implement, or what the opinions are among policy makers about the future of distance education in the schools. An issue raised by the Office of Technology Assessment in 1989 ("Linking for Learning: A New Course for Education") has to do with the certification of teachers involved in distance education programs, as the teacher certification process varies from state to state, and at times among universities and colleges within a particular state. A survey of chief state school officers in the United States, including the District of Columbia, was conducted in 1990 for the Corporation for Public Broadcasting (APB), Organization of State Broadcast Executives (OSBE), and the Southern Educational Communications Association (SECA). Questions were asked regarding state-level involvement in distance education and teacher certification issues. Responses from 41 states (response rate 80%) provided an overview of activity and opinion. These responses are discussed in the context of individual questions in each of the two areas, and it is concluded that, although there is a continuing need for research and education of policymakers, the majority of states appear to recognize the opportunities that exist for distance education through telecommunications, and that they are exploring ways to make education more available through technology. Responses from the individual states to each of nine questions are tabulated in the appendix. (Contains 7 references.) (ALF)

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A SURVEY OF STATE-LEVEL INVOLVEMENT IN DISTANCE EDUCATION AT THE ELEMENTARY AND SECONDARY LEVELS

Richard England, Ed.D.

Number 3 in the series Research Monographs

American Center for the
Study of Distance Education
The Pennsylvania State University

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The Survey data was gathered under the auspices of the Corporation for Public Broadcasting, the Organization of State Broadcast Executives, and the Southern Educational Communications Association.

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Preface

There is at present an unusually high degree of interest among educators and educational policy makers in the possibilities of improving and expanding elementary and secondary education by incorporating some forms of distance education into traditional schooling. In this context, various policy issues are becoming critical, such as how to coordinate and regulate programs, especially those delivered from out-of-state; how to accreditate such programs; how to fund such delivery; how to share resources among institutions and states; what forms of program design and delivery cooperation are feasible; what procedures are required to facilitate reporting and accountability; what forms of faculty development are needed and how can they be implemented.

The making of policy about these and other issues concerning distance education in the schools continues to lag behind the development of the new telecommunications technology as well as the pioneering efforts of educators to apply this technology. Equally seriously, most policy making is blind, since no procedures and little funding has been provided for research to find out what issues States consider important, what policies they have implemented, or intend to implement, or what the opinions are among policy makers about the future of distance education in the schools. In a review of literature commissioned for the Office of Technology Assessment's 1989 report, "Linking for Learning," and published as ACSDE Research Monograph Number 2 under the title *The Effects of Distance Learning: A Summary of Literature*, we wrote that, "research is urgently needed into the procedures by which states are forming their policies with regard to distance education, and what those policies are." In this monograph we offer Richard England's attempt to find out something about the attitudes of the various states to distance education in the schools, and thus make a contribution to meeting the need mentioned above.

In the previous monograph we also wrote, "It is essential, before further large sums of money and effort are expended, while distance education is still in its

formative growth stages, that infrastructures and on-going processes are set up to provide reliable information to policy makers." We endorse England's expression of gratitude for the support of the Corporation for Public Broadcasting, the Organization of State Broadcast Executives, and the Southern Educational Communications Association. We hope this relatively modest report will stimulate a heightened awareness of the critical importance of research in the whole field of distance education, but especially the need for policy research, and that individuals and agencies at all levels will take up the challenge to implement and to support further on-going research that will build on England's pioneering effort.

Michael Grahame Moore

A Survey of State-Level Involvement in Distance Education at the Elementary and Secondary Levels

Richard England

Introduction

In the United States one of the strongest needs identified in education is the need for access to qualified instruction. A report to the Southern Growth Policies Board by the Southern Technology Council indicated that projected teacher shortages are great in the areas of biology, physics, chemistry, and mathematics. The Council stated that "A 1988 survey of school officials concerning the supply and demand for teachers in 1989 reveals that the imbalances are worse in math and the sciences than in any other field except special education" (Southern Technology Council 1989, 19). The shortages and the impact on the quality of instruction are further complicated by the number of teachers required to teach outside of their respective field. "In the South, only twenty percent of physics teachers have degrees in physics, compared to thirty-nine percent outside the South.... only fifteen percent of elementary school teachers in the U.S. surveyed last year felt qualified to teach natural science" (Southern Technology Council 1989, 18). The report also revealed that by 1983 the degrees awarded in science education in the member states of the Southern Regional Education Board had dropped to two-thirds of the number awarded in 1978.

Other issues have emerged which are certain to have a profound impact on existing education systems (England 1987, 1989). Major issues are related to inequities in funding of education. Per pupil expenditures are often cited as an indication of state support for education. These expenditures are frequently used as

comparison data among states in an effort to determine where the greatest needs exist nationally. Recently, the concern of per pupil expenditures within a state among the local education districts has become more of an issue than in times past. Inequities were found to be great enough to warrant drastic changes in the Texas and Kentucky educational systems. School systems having a comparatively low expenditure per pupil are not able to offer the same level of instruction and instructional support as the systems having comparatively high expenditures per pupil. Such disparities within a state have caused additional concern over the quality of education. The Southern Technology Council has observed, however, that "parity in education is a long-term goal, and despite infusion of new funds and the introduction of new and innovative initiatives, state rankings of many educational indicators still remain low" (Southern Technology Council 1989, 12).

Given the above concerns, as well as many other concerns not specifically stated, state education systems are faced with challenges which require new thinking about the educational process. More state and local school systems are now turning to the use of technology in an effort to address the difficulties of providing quality instruction without regard to geographic location and time. In the October 1989 issue of *Electronic Learning* a survey of all fifty states and Puerto Rico revealed that virtually every state department of education is providing funds for the development of technology to provide education (Bruder 1989). In addition to the development of software, purchase of hardware, and curriculum development incorporating technology, thirty-nine states indicated that they are operating or planning to develop distance learning projects. The recent decision by the Texas State Board of Education to allow textbook funds to also be used to purchase a video-based science "textbook" reflects new thinking on the part of education agencies which recognize the impact of technology. The Southern Technology Council has emphasized the need to explore the use of technology, non-traditional learning, and distance education to meet the educational needs of school age children, colleges and universities, and continuing education for professionals. A

recommendation coming from the Council advocated expansion of the use of "computer-assisted and distance learning techniques, particularly in small, poor, and isolated school districts" (Southern Technology Council 1989, 21).

As the demands for equal educational opportunity increase, without proportional increases in funding, traditional education structures will continue to turn to effective utilization of technology to meet the needs. It is now a national imperative for education to use new and innovative methods to ensure an educated society (England 1990).

The Office of Technology Assessment in 1989 published a study of distance education in the United States. The report entitled *Linking for Learning: A New Course for Education* (1989) provides an overview of the activities in selected states, while raising issues regarding state and federal roles in distance education, the role of teachers and students, and policy issues which must be addressed. One of the issues raised which States must address has to do with the certification of teachers involved in distance education programs. "The certification of the teleteacher is the most prominent issue that State Education Agencies (SEAs) are grappling with regarding distance learning. This is particularly true when a complete course of instruction originates in one state and is received in another state" (U.S. Congress 1989, 120).

An Overview of the Teacher Certification Process

The teacher certification process varies from state to state, and at times among universities and colleges within a particular state. It is not uncommon for institutions and states to review and change the requirements for certification in any given area. The changes may be reflected in core course requirements, subject specialty requirements, or in degree level.

Many higher education institutions in response to various education reform efforts have abolished undergraduate colleges of education, particularly in

secondary subject areas such as math, physics, etc., and now require certification at the master's level. Generally, exceptions are made to this trend in the areas of early childhood education, special education, and physical education.

The process to achieve certification as a teacher may also be dependent on the current political climate within a state. For example, a state may implement a state test for certification, but the courts determine that the test is biased toward one group or another and declare the test invalid. The result is that some teachers will be required to take a test for certification in one year, and the next year not be required to do so. In addition to state testing, national exams such as the National Teachers Examination may be used as a part of the certification process. Some states may require certain score levels while other states merely require that a test score be on file before issuing a certificate.

Alternative paths to certification are also becoming common. Several universities now have fifth year, non-traditional certification which leads to the degree Master of Arts in Teaching. This particular program is designed for individuals who hold a discipline specific degree, such as in physics or foreign languages, but lack the coursework in tests and measurements, teaching methods, and related studies necessary for teaching in most school systems. In an effort to attract highly qualified individuals into the teaching profession, particularly in high need areas, a provisional certificate may be issued by the state while the individual completes the necessary requirements for full certification. Again, this varies from state to state and provisional certification is not always available in every subject and/or administrative area.

All of the above mentioned situations are subject to rapid change. One year the state may serve as the certifying officer and the next year the state may assign responsibility to the universities and colleges of education, or vice versa. Because of the rapid changes that occur, it is frequently advisable for individuals seeking certification in a particular state to review certification requirements, and certification agreements that may exist among states. Further, certification may be

issued at one level in one state and at another level in another state. For example, Tennessee issues certificates which reflect degree level, i.e., bachelor's, master's, and doctorate, while Alabama certification currently does not reflect degree level but the state's own certification levels, i.e. B, A, AA.

Though perhaps not as common, some districts within a state may set requirements for teachers working within the respective district which are not necessarily the same as another district within the state. One district may provide a pay scale which reflects degree level regardless of certification, while another will award additional pay for advanced degrees only if the degrees are in the discipline being taught. In other words, an individual with undergraduate certification in Art and a master's degree in education may not receive master's degree pay in some districts unless the graduate degree is specifically in Art Education. These situations reflect the complex issues and "red tape" associated with achieving teacher certification in one state and attempting to obtain certification in another. Distance teaching accentuates these complexities.

Survey of the States: State Involvement in Distance Education

A survey of chief state school officers in the United States, including the District of Columbia, was conducted in 1990 for the Corporation for Public Broadcasting (CPB), Organization of State Broadcast Executives (OSBE), and the Southern Educational Communications Association (SECA) (OSBE 1991). A summary of survey results is provided in the Appendix. Questions were asked regarding state-level involvement in distance education, and teacher certification issues. In an effort to ensure a higher percentage of response, the survey requested a "yes" or "no" response to specific questions. In several instances states would respond by submitting either formal or working documents which reflect current studies and recommendations for their respective state. When possible, answers to survey questions were derived from these documents. When answers could not be

determined, the question received the indication "No Response" for the state. Responses derived from the information provided are subject to error, and reflect the opinion of the researcher based on a review of material provided. Several states also provided brief comments to accompany their response to specific questions. These comments, or a summary of the comments, are provided with the response. Forty-one states responded to the survey for a response rate of 80% (see Appendix).

It should be noted that the survey provided an overview of activity and opinion. Further, several states indicated that studies are currently being conducted which could result in a change in the policies reflected in the responses.

The first question regarding state involvement in the use of telecommunications to provide education either for academic course credit, or academic enrichment at the elementary and/or secondary levels, revealed the high level of interest throughout the nation in distance education. With 90% of those surveyed (37 states) indicating involvement and only 10% (4 states) responding "no" it is obvious that the use of telecommunications in education is widespread.

Reinforcing the findings for the first question, the second response to state involvement, or planned involvement, in distance education through either state networking and/or regional or national consortia, reveals an even higher level of interest. As opposed to 90% responding affirmatively to Question 1, 93% (38 states) responded "yes" to this question, with only 7% (3 states) responding "no" to current or planned consortia activity in distance education.

Perhaps one of the earliest indicators to lack of coordination among the various providers of distance education was the response to the third question which asked for information regarding a special state-level department to coordinate distance education systems. Of the states responding, 56% (23 states) indicated that one was either in place, or being planned. Forty-four percent (18 states) indicated that they either did not have such a department, nor was one in the planning stage. A word of explanation is needed for these responses. The additional comments

provided by the states gave more insight into the organizational structures within a state working with distance education. In Arkansas for example a program person was assigned to coordinate these activities, therefore, Arkansas responded with a "yes" to this question, while Montana responded with a "no" because coordination was to be assigned to an existing department. Massachusetts indicated that coordination would be through a "quasi-state agency" so they responded "yes" with Georgia indicating that this is a "state personnel responsibility" so they responded "no." Before too many conclusions should be drawn about the lack of coordination, consideration should be given to the existing state structures that may be designed to work with programs such as distance education, though the designation may be ambiguous.

Question 4 regarding state involvement raised the issue of funding for the development and/or planning of distance education systems. With 59% (24 states) responding with a "yes" and 41% (17 states) indicating "no" the percentages are sufficient to reach the conclusion that there is at least the recognition by the majority of states of the need for funding distance education systems. Again, these responses must be taken within the context of the survey. Without further information for each state, it would be inappropriate to draw too many conclusions about commitments. Indiana, for example, indicated that funding would be requested in the 1991 budget. Arizona indicated that legislation was anticipated, but no timelines were given. Funding for education is frequently motivated as much by the politics of the state as consideration for the welfare of the children to be served. The political climate at the time of the response could greatly influence the final outcomes for distance education systems in many of these states.

Not surprisingly there was almost the same type of response for the fifth question which asked, "Does your state take into consideration students enrolled in distance education programs delivered through telecommunications, i.e. television, videotape, satellite delivery, computer, etc. for funding purposes?" Of those responding, 56% (23 states) said "yes," 34% (14 states) said "no," and 10%

(4 states) did not respond. In fairness to the states' responses, some could have been uncertain about how to respond. As illustrated by Vermont, though the response was "yes," the explanation was given that such was a local decision, not controlled by the state. This statement gives some insight into the true nature of the tenuous relationships that frequently exist within the politics of education. Local systems exercise more power than others in some states, while a state-level agency may be more powerful than the local systems in other situations.

Questions 6 and 7, perhaps more than any other questions which addressed state involvement, revealed a national trend, if one can truly be identified. Question 6 asked, "Do you have or anticipate special legislation which will provide funding for distance education systems in your state?" Sixty-eight percent (28 states) said "yes" with 24% (10 states) saying "no," while 8% (3 states) provided another response. Funding and legislation go "hand-in-hand" in revealing where there is true concern. There is a favorable trend nationally trend toward funding distance education. Wisconsin and Nevada responded that they did not know if such legislation was planned, while Louisiana simply stated, "perhaps."

When Question 6 is viewed in concert with the response to Question 7 an impetus for considering the use of distance education systems is probably revealed. Question 7 asked, "Do you believe distance education systems can provide a viable alternative for states which must address equity funding issues among the various districts within the state?" Of the 41 states responding to the survey, 90% (37 states) said "yes," 5% (2 states) said "no" and 5% (2 states) provided another response or no response. Throughout the nation more attention is being given to issues regarding equity funding in education. It should be recognized that distance education is not "the sole solution" as indicated by Oregon, and that distance education is only a part of the solution as indicated by Connecticut, but distance education *can* be part of the solution. Because of the shortage of teachers in highly specialized fields such as foreign languages, physics, advanced math, etc. and the need to provide opportunities to study these courses to all students regardless of

their location, distance education is a logical consideration. Along with these considerations the practicality of distance education as an investment must be examined. As the technology becomes more affordable and refined, distance education systems become more attractive. Well established systems that are responsive to the needs of the students may allow some states to avoid court mandated changes which could prove to be more costly in the long run than initial investments in well-structured distance education initiatives.

Survey of States: Teacher Certification Issues in Distance Education

The questions which focused primarily on teacher certification issues revealed the diverse approaches that exist across the nation. The appendix attached to this report provides a summary of the responses. Again, it is necessary to emphasize the control states maintain over education in their respective states. The education structures within each state are, in theory, designed to address the unique needs of the constituency served. Probably a comment provided by one individual responding to the survey also revealed an underlying component that exists, though seldom stated. The comment was made, "The other states simply do not educate their teachers as well as we do here. We don't want just anybody teaching our children." While the intent of the sentiment is certainly appreciated, the irony was that the individual was from a state that historically has rated very poorly in support of education, student retention, graduation rates, and overall literacy of the citizenry. Therefore, it is important to keep in mind the responsibility of the state in education, and other unstated issues that can affect the responses to the following questions.

The first question simply asked if special certification was required for teachers involved in distance education. Only one of those surveyed said "yes," while 85% (35 states) said "no," with 12% (5 states) giving another response or no response. It appears that most states simply require the appropriate subject or grade

level certification. No special certification is required simply because of a unique delivery system.

The second question began to reveal the situations one may face when trying to use teachers certified in one state as teachers through distance education in another state. The question was, "Does your state permit out-of-state teachers who hold certification in their respective states to teach within your state's borders without seeking additional certification?" Only 27% (11 states) responded "yes," with 51% (21 states) saying "no," and 22% (9 states) giving another response. A variety of issues can affect the response to this question, but one issue that perhaps went unstated, except indirectly by Hawaii, was the role of the state teachers' associations. Hawaii responded that the teachers' union and accreditation personnel examine this on a case-by-case basis. Consider the perceived "threat" of allowing teachers certified in one state to teach in another without additional certification. There could be the concern on the part of teachers in a given state that teachers from other states would replace them with little or no training that could be essential to meet the needs of their students. For example, teachers certifying in a state, such as Alaska, probably address different concerns from those certifying in a state such as Florida. Certainly there are similarities that exist in any teacher education program, and reciprocal agreements exist among some states. But, the native American cultures in Alaska would probably require a better understanding by those teaching in Alaska, while there is probably a need for more awareness of Spanish speaking cultures if one were teaching in south Florida. Such differences are not intended to imply that one system of training is better than another, but rather emphasizes the wonderfully diverse cultures that are represented across the United States. It is appropriate that each state consider the needs of its populace, but as distance education systems become more commonplace the issues associated with teacher certification will need to be re-examined.

There are also implications for higher education in K through 12 education. The third question asked, "Does your state currently have graduate teacher

education courses offered through distance education systems, i.e. television, videotape, computers, etc.?" Fifty-nine percent (24 states) said "yes," 29% (12 states) said "no," and 12% (5 states) provided another response. It should be noted that a few of those responding "no" indicated such was possible for the future. As the requirements for teacher certification increase, perhaps even to the level of requiring a graduate degree for full certification, there is the strong possibility that distance education programs at the graduate level in education will begin to increase. Teachers already must spend an enormous amount of time on school related functions and business outside of the usual school day of seven to eight hours. The convenience of on-site graduate education courses no doubt will become more and more attractive for teachers, especially if graduate degrees are rewarded with a higher pay level.

Complementing Question 3, Question 4 asked if the state would recognize in-service credits for teachers earned through distance education formats. Of those responding, 73% (30 states) said "yes," only 5% (2 states) said "no," and 22% (9 states) provided either another form of response, or no response. A few states indicated that while such credits would be accepted, there was a need for prior approval for the courses. This question may reveal a trend toward acceptance of distance education. Some continuing education courses approach the same level as regular graduate courses, depending on course structure.

Questions 5 and 6 also revealed something about the teacher certification process. Question 5 asked if the state would recognize credits earned through distance education systems for re-certification. Seventy-five percent of those who responded (31 states) said "yes," only 8% (3 states) said "no" with 17% (7 states) providing another explanation or no response. Among the other responses, there were indications that this is currently under study, or there was some uncertainty about how the state would respond. Also, in fairness to those responding, no indication was given in the question about whether the course would originate in-state or out-of-state. For several responding "yes," the determining criteria was if

education courses offered through distance education systems, i.e. television, videotape, computers, etc.?" Fifty-nine percent (24 states) said "yes," 29% (12 states) said "no," and 12% (5 states) provided another response. It should be noted that a few of those responding "no" indicated such was possible for the future. As the requirements for teacher certification increase, perhaps even to the level of requiring a graduate degree for full certification, there is the strong possibility that distance education programs at the graduate level in education will begin to increase. Teachers already must spend an enormous amount of time on school related functions and business outside of the usual school day of seven to eight hours. The convenience of on-site graduate education courses no doubt will become more and more attractive for teachers, especially if graduate degrees are rewarded with a higher pay level.

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within your state's borders?" Only 37% (15 states) said "yes," with 29% (12 states) indicating "no," while 34% (14 states) provided another response or no response. When these figures are compared with those presented in Question 7 it reveals the struggle currently taking place to determine how to address distance education teachers. Virtually every state responding to this question provided qualifiers to the response. Some required that the individual seek in-state certification, others emphasized that consideration should be given to reciprocity agreements in certification, still other states indicated the need for the individual to work through an in-state higher education institution to determine what would be required.

The final question asked, "Do you believe that the use of telecommunications/technology to provide education will facilitate a movement toward a national teacher certification process?" Thirty-seven percent (15 states) said "yes," 44% (18 states) said "no," and 19% (8 states) provided another response. Perhaps the additional comment provided by Delaware states it best by saying, "It is a unique issue." National certification would be both good and bad. The good would be the uniformity of training that would exist across the nation, perhaps bringing teacher certification requirements to a higher level. Certainly national certification would make the teaching profession more attractive to a mobile society. Anyone who has attempted to certify in more than one state has faced the confusion of meeting the various requirements imposed from state to state. Some of these requirements are probably good, but others raise questions about the seriousness of educating teachers as opposed to maintaining enrollments in colleges of education. The good also becomes the bad if the requirements for teacher certification are diminished in an effort to accommodate a larger population. With certification requirements set by the state, a more confined locus of control exists and therefore the quality can be monitored more effectively than if requirements were imposed at the national level. National certification is a very complex and highly political issue. Virtually everyone in our society is exposed to some form of

formal education for a period of time. This involvement makes education everyone's business, and everyone will have an opinion about students, schools, teachers, and ways to improve the system. A move toward national certification may, or may not, be something to consider. If distance education develops in the future at the same rate that it has developed over the past five years, there will need to be rethinking about the requirements to teach in our schools.

Conclusion

The information presented in this report certainly can be subjected to various types of analyses. No doubt the information raises more questions about education in our country and the role of technology in providing access to education. There are important factors, however, that should be considered. The factors are the political and/or policy issues that are constant in education. Regardless of the abilities of practitioners to develop high quality distance education systems, the decisions to use those systems to their fullest are usually made by those who are largely removed from education. In addition to funding or lack of funding, which frequently reflects political decisions, there are still concerns expressed about the quality and true intent of distance education. Distance educators must, in addition to studying the effects of distance learning and developing more effective methods of utilizing distance education, educate the policy makers about the benefits of using what is available to address some of the issues facing education today. As evident in the data provided in this report, such discussions are taking place, but much still must be done to raise the awareness and understanding of the supporters of mainstream educational policies. There is the need to re-examine the teacher certification process for distance educators, to revisit reciprocal certification guidelines, to consider funding distance education as a regular part of a state's education program, and modify the requirements for textbook purchasing to include video-based education programs. As students of the current generation grow to

become the leaders in our society, they will have a familiarity with the use of technology that will make its use more commonplace in education, public and private. Education policies which are proactive instead of reactive may be difficult to develop, but proactive policies will allow education to take greater advantage of current opportunities instead of trailing the process as so frequently is the case. Though perhaps confused, it is reassuring to know that the majority of states appear to recognize the opportunities that exist for distance education through telecommunications, and that they are exploring ways to make education more available through technology.

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Appendix

STATE INVOLVEMENT

Question 1: Is your state involved in the use of telecommunications to provide education either for academic course credit, or academic enrichment at the elementary and/or secondary levels?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			
Arizona	Y			
Arkansas	Y			
California	Y			
Colorado		N		
Connecticut	Y			
Delaware	Y			
Florida	Y			
Georgia	Y			
Hawaii	Y			
Idaho	Y			
Illinois	Y			
Indiana	Y			
Iowa	Y*			
Kansas	Y			
Louisiana	Y			
Maine	Y			
Maryland	Y			
Massachusetts	Y			
Mississippi	Y			
Montana	Y			Through funding.
Nebraska	Y			
Nevada		N		
New Hampshire		N		
New Mexico	Y			In a few selected schools.
New York	Y			
North Carolina	Y			
North Dakota	Y			
Ohio	Y			
Oregon	Y			
South Carolina	Y			
South Dakota	Y			A few schools through TI-IN.
Tennessee	Y			
Texas	Y			
Utah	Y			
Vermont	Y			
Virginia	Y			
Washington	Y			
Washington, D.C.		N		
Wisconsin	Y			
Wyoming	Y			

*Information derived from documents provided by the state

N=41 Y=Yes (37)90% N=No (4)10% NR/O=No Response/Other (0)

Question 2: Is your state involved in, or planning, a distance education system either through state networking and/or regional or national consortia?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			
Arizona	Y			
Arkansas	Y			
California	Y			
Colorado	Y			
Connecticut	Y			
Delaware	Y			Planning.
Florida	Y			
Georgia	Y			
Hawaii	Y			
Idaho	Y			
Illinois	Y			
Indiana		N		
Iowa	Y*			
Kansas	Y			
Louisiana	Y			
Maine	Y			
Maryland	Y			
Massachusetts	Y			
Mississippi	Y			
Montana	Y			
Nebraska	Y			
Nevada		N		
New Hampshire	Y			Planning.
New Mexico	Y			
New York	Y			
North Carolina	Y			
North Dakota	Y			
Ohio	Y			
Oregon	Y			
South Carolina	Y			
South Dakota	Y			State networking.
Tennessee	Y			
Texas	Y			
Utah	Y			
Vermont	Y			
Virginia	Y			
Washington	Y			
Washington, D.C.		N		
Wisconsin	Y			
Wyoming	Y			

*Information derived from documents provided by the state

N=41 Y=Yes (38)93% N=No (3)7% NR/O=No Response/Other (0)

Question 3: Does your state have a special state-level department, or is one planned, to coordinate distance education systems?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		
Arizona	Y			
Arkansas	Y			Program person assigned to coordination.
California	Y			
Colorado		N		
Connecticut	Y			
Delaware		N		
Florida	Y			
Georgia		N		State personnel responsibility.
Hawaii	Y			
Idaho		N		
Illinois	Y			
Indiana		N		
Iowa	Y*			
Kansas		N		
Louisiana	Y			
Maine	Y			
Maryland	Y			
Massachusetts	Y			Quasi state agency.
Mississippi		N		
Montana		N		To be assigned to existing department.
Nebraska	Y			
Nevada		N		
New Hampshire		N		
New Mexico	Y			
New York	Y			
North Carolina	Y			
North Dakota		N		
Ohio		N		
Oregon	Y			
South Carolina	Y			
South Dakota		N		
Tennessee	Y			
Texas	Y			
Utah	Y			
Vermont		N		
Virginia	Y			
Washington		N		
Washington, D.C.		N		
Wisconsin	Y			
Wyoming		N		

*Information derived from documents provided by the state

N=41 Y=Yes (23)56% N=No (18)44% NR/O=No Response/Other (0)

Question 4: Does your state provide funding for the development and/or planning of distance education systems?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		
Arizona		N		Legislation anticipated.
Arkansas		N		
California	Y			
Colorado		N		
Connecticut	Y			
Delaware		N		
Florida	Y			
Georgia		N		In-kind support provided.
Hawaii	Y			
Idaho	Y			
Illinois		N*		
Indiana		N		Requested in 1991 budget.
Iowa	Y*			
Kansas		N		
Louisiana	Y			
Maine	Y			
Maryland	Y			
Massachusetts	Y			
Mississippi		N		
Montana	Y			
Nebraska	Y			
Nevada		N		
New Hampshire		N		
New Mexico		N		
New York	Y			
North Carolina	Y			
North Dakota	Y			
Ohio		N		
Oregon	Y			
South Carolina	Y			
South Dakota	Y			
Tennessee	Y			
Texas	Y			
Utah	Y			
Vermont	Y			Through the state college system.
Virginia	Y			
Washington		N		
Washington, D.C.		N		
Wisconsin	Y			
Wyoming		N		

*Information derived from documents provided by the state

N=41 Y=Yes (24)59% N=No (17)41% NR/O=No Response/Other (0)

Question 5: Does your state take into consideration students enrolled in distance education programs delivered through telecommunications, i.e. television, videotape, satellite delivery, computer, etc. for funding purposes?

STATE	YES	NO	NR/O	COMMENTS
Alabama			NR	
Arizona		N		
Arkansas		N		
California	Y			
Colorado		N		
Connecticut		N		
Delaware	Y			
Florida	Y			
Georgia	Y			
Hawaii	Y			
Idaho	Y			
Illinois			NR	
Indiana		N		
Iowa			NR	
Kansas		N		
Louisiana	Y			
Maine	Y			
Maryland		N		
Massachusetts		N		Too soon.
Mississippi		N		
Montana	Y			If program satisfies accreditation.
Nebraska	Y			
Nevada		N		
New Hampshire	Y			
New Mexico			NR	
New York	Y*			
North Carolina	Y			
North Dakota	Y			
Ohio		N		
Oregon	Y			
South Carolina		N		
South Dakota		N		
Tennessee	Y			
Texas		N		
Utah	Y			
Vermont	Y			Local decision, not controlled by state.
Virginia	Y			
Washington	Y			
Washington, D.C.	Y			
Wisconsin	Y			
Wyoming	Y			

*Information derived from documents provided by the state

N=41 Y=Yes (23)56% N=No (14)34% NR/O=No Response/Other (4)10%

Question 6: Do you have or anticipate special legislation which will provide funding for distance education systems in your state?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		
Arizona	Y			
Arkansas	Y			Funding proposed through AETN for 1991.
California	Y			
Colorado		N		
Connecticut	Y			
Delaware		N		
Florida	Y			
Georgia		N		
Hawaii	Y			
Idaho	Y			
Illinois	Y			
Indiana	Y			
Iowa	Y*			
Kansas		N		
Louisiana			O	Perhaps.
Maine	Y			
Maryland	Y			
Massachusetts	Y			
Mississippi		N		
Montana	Y			
Nebraska	Y			
Nevada			O	Don't know.
New Hampshire		N		
New Mexico		N		
New York	Y*			
North Carolina	Y			
North Dakota	Y			
Ohio	Y			
Oregon	Y			Already in place.
South Carolina	Y			
South Dakota	Y			
Tennessee	Y			Already have funding.
Texas	Y			
Utah	Y			
Vermont	Y			
Virginia	Y			
Washington	Y			
Washington, D.C.		N		
Wisconsin			O	Don't know.
Wyoming		N		

*Information derived from documents provided by the state

N=41 Y=Yes (28)68% N=No (10)24% NR/O=No Response/Other (3)8%

Question 7: Do you believe distance education systems can provide a viable alternative for states which must address equity funding issues among the various districts within the state?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			
Arizona	Y			
Arkansas	Y			
California	Y			
Colorado	Y			
Connecticut			O	Only in part.
Delaware	Y			
Florida	Y			
Georgia	Y			
Hawaii	Y			
Idaho	Y			
Illinois	Y			
Indiana	Y			
Iowa			NR	
Kansas		N		
Louisiana	Y			
Maine	Y			
Maryland	Y			
Massachusetts	Y			
Mississippi	Y			
Montana	Y			
Nebraska	Y			
Nevada	Y			
New Hampshire	Y			
New Mexico	Y			
New York	Y*			
North Carolina	Y			
North Dakota	Y			
Ohio	Y			
Oregon	Y			But, not the sole solution.
South Carolina	Y			
South Dakota	Y			
Tennessee	Y			
Texas	Y			
Utah	Y			
Vermont	Y			
Virginia	Y			
Washington	Y			
Washington, D.C.	Y			
Wisconsin		N		
Wyoming	Y			

*Information derived from documents provided by the state

N=41 Y=Yes (37)90% N=No (2)5% NR/O=No Response/Other (2)5%

TEACHER CERTIFICATION

Question 1: Does your state require special certification (other than subject area or grade level certification) for teachers involved in distance education courses within your state, i.e. teaching by means of television, videotapes, computer, etc.?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		
Arizona		N		
Arkansas		N		
California		N*		
Colorado		N		
Connecticut		N		
Delaware		N		
Florida		N		
Georgia		N		
Hawaii		N		
Idaho		N		
Illinois		N		
Indiana		N		
Iowa			NR	
Kansas		N		
Louisiana		N		
Maine			O	Issue currently under study.
Maryland			NR	
Massachusetts			O	Issue addressed as MCET network develops programming.
Mississippi		N		
Montana		N		Not if in-state, in area of certification.
Nebraska		N		
Nevada		N		
New Hampshire		N		
New Mexico		N		
New York			NR	
North Carolina		N		
North Dakota		N		
Ohio		N		
Oregon		N		
South Carolina		N		
South Dakota		N		
Tennessee		N		
Texas		N		
Utah		N		
Vermont		N		
Virginia		N		
Washington		N		
Washington, D.C.	Y			
Wisconsin		N		
Wyoming		N		

*Information derived from documents provided by the state

N=41 Y=Yes (1)3% N=No(35)85% NR/O=No Response/Other (5)12%

Question 2: Does your state permit out-of-state teachers who hold teacher certification in their respective states to teach within your state's borders without seeking additional certification?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		Must seek Alabama certification.
Arizona		N		
Arkansas		N		
California			NR	
Colorado	Y			
Connecticut		N		
Delaware			O	No policy.
Florida		N		Certificates from other states not valid in Florida.
Georgia		N		
Hawaii			O	Teachers' union and accreditation personnel examine on case-by-case basis.
Idaho	Y			
Illinois	Y			
Indiana	Y			
Iowa			NR	
Kansas		N		
Louisiana		N		
Maine			O	Issue under study.
Maryland			NR	
Massachusetts			O	Issue addressed as MCET network develops programming.
Mississippi	Y			
Montana		N		
Nebraska		N		
Nevada		N		
New Hampshire	Y			If agreement exists between certifying agencies.
New Mexico		N		
New York			NR	
North Carolina		N		
North Dakota		N		New policy being formulated.
Ohio	Y			
Oregon		N		Oregon certification is required.
South Carolina	Y			If teaching via satellite from another state the teacher would need to be certified in his/her own state.
South Dakota	Y			Issued limited certificate if certified in own state.
Tennessee		N		
Texas	Y			
Utah		N		Not yet.
Vermont			O	Not an issue/not seen as problem.
Virginia	Y			
Washington		N		
Washington, D.C.		N		
Wisconsin		N		
Wyoming		N		Will be allowed under new program approval certification effective in 1992.

N=41 Y=Yes (11)27% N=No (21)51% NR/O=No Response/Other (9)22%

Question 3: Does your state currently have graduate teacher education courses offered through distance education systems, i.e. television, videotape, computers, etc.?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		Possible for the future.
Arizona		N		Will in the future.
Arkansas		N		
California	Y*			
Colorado	Y			
Connecticut	Y			
Delaware	Y			Videotape.
Florida			O	Information not available.
Georgia		N		
Hawaii	Y			
Idaho	Y			
Illinois		N		
Indiana	Y			
Iowa	Y*			
Kansas	Y			
Louisiana		N		
Maine	Y			
Maryland			NR	
Massachusetts			O	Issue addressed as the MCET network develops programming.
Mississippi	Y			
Montana		N		The state doesn't offer the courses, but some institutions are including or exploring these courses as part of a program that leads to a graduate teacher education degree.
Nebraska	Y			From other states.
Nevada	Y			
New Hampshire	Y			
New Mexico	Y			A few courses.
New York			NR	
North Carolina	Y			
North Dakota		N		
Ohio		N		
Oregon			NR	
South Carolina	Y			
South Dakota	Y			A few courses.
Tennessee	Y			
Texas	Y			
Utah		N		
Vermont	Y			
Virginia	Y			
Washington	Y			
Washington, D.C.		N		
Wisconsin	Y			
Wyoming		N		

*Information derived from documents provided by the state

N=41 Y=Yes (24)59% N=No (12)29% NR/O=No Response/Other (5)12%

Question 4: Would your state recognize credits earned through distance education systems for teacher in-service credit?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			Must be an accredited institution.
Arizona	Y			
Arkansas	Y			
California			NR	
Colorado	Y			
Connecticut	Y			
Delaware			O	Must be approved in advance.
Florida	Y			The credit would have to be part of the Master Inservice Plan approved by DOE.
Georgia		N		Subject to state board approval.
Hawaii	Y			
Idaho	Y			
Illinois	Y			Must be an accredited institution.
Indiana			NR	
Iowa	Y*			
Kansas			NR	
Louisiana			O	Not applicable.
Maine	Y			
Maryland			NR	
Massachusetts			O	Issue addressed as MECT network develops programming.
Mississippi	Y			
Montana	Y			
Nebraska	Y			In-service credits are administered locally.
Nevada	Y			
New Hampshire	Y			
New Mexico			NR	
New York	Y			
North Carolina	Y			
North Dakota	Y			
Ohio	Y			
Oregon	Y			
South Carolina	Y			Must be an accredited institution.
South Dakota	Y			
Tennessee	Y			
Texas	Y			
Utah		N		Not yet.
Vermont	Y			
Virginia			NR	
Washington	Y			
Washington, D.C.	Y			
Wisconsin	Y			
Wyoming	Y			

*Response derived from information provided

N=41 Y=Yes (30)73% N=No (2)5% NR/O=No Response/Other (9)22%

Question 5: Would your state recognize credits earned through distance education systems for recertification?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			Must be an accredited institution.
Arizona	Y			
Arkansas	Y			Credit must be from an approved program.
California			NR	
Colorado	Y			
Connecticut			O	Determined by university.
Delaware	Y			Must be approved in advance.
Florida	Y			Credit accepted if on the transcript as resident credit, credit by correspondence not acceptable.
Georgia		N		
Hawaii	Y			Must be an accredited institution.
Idaho	Y			
Illinois	Y			
Indiana	Y			
Iowa			NR	
Kansas	Y			
Louisiana	Y			If on official university transcript.
Maine	Y			
Maryland			NR	
Massachusetts			O	Issue addressed as MCET network develops programming.
Mississippi	Y			
Montana	Y			
Nebraska	Y			
Nevada	Y			
New Hampshire			O	Not sure.
New Mexico			O	Not applicable.
New York		N		
North Carolina	Y			
North Dakota	Y			
Ohio	Y			
Oregon	Y			Special arrangements required through Oregon institution.
South Carolina	Y			Must be an accredited institution.
South Dakota	Y			
Tennessee	Y			If through state approved program.
Texas	Y			
Utah		N		Not yet.
Vermont	Y			
Virginia	Y			
Washington	Y			
Washington, D.C.	Y			
Wisconsin	Y			
Wyoming	Y			

N=41 Y=Yes (31)75% N=No (3)8% NR/O=No Response/Other (7)17%

Question 6: Would your state recognize credits earned through distance education systems for initial certification subject areas?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			Must be an accredited institution.
Arizona	Y			
Arkansas	Y			Program must be accredited.
California			NR	
Colorado	Y			
Connecticut			O	Determined by university.
Delaware		N		
Florida		N		
Georgia	Y			If student was transferring from a state where distance education courses were acceptable to completion of a degree in an approved program for certification in Georgia.
Hawaii	Y			Institution must be accredited.
Idaho	Y			Credits must appear on transcript.
Indiana	Y			
Illinois	Y			Institution must be accredited.
Iowa			NR	
Kansas			O	Not applicable.
Louisiana	Y			If credits on university transcript.
Maine			O	Issue under study.
Maryland			NR	
Massachusetts			O	Issue addresed as the MCET network develops programming.
Mississippi	Y			
Montana	Y			Course must meet institutional standards.
Nebraska			O	Don't know/determined by college.
Nevada			NR	
New Hampshire			O	Not certain.
New Mexico			O	Not certain.
New York		N		
North Carolina	Y			
North Dakota		N		Policy under study.
Ohio		N		
Oregon	Y			Arrangements must be through Oregon institution.
South Carolina		N		
South Dakota	Y			Credits must be on transcript.
Tennessee	Y			If offered through approved program.
Texas	Y			
Utah		N		Not yet.
Vermont	Y			Only if from a "qualified" institution.
Virginia	Y			
Washington		N		
Washington, D.C.		N		
Wisconsin		N		
Wyoming	Y			Upon transcript analysis until 1992.

N=41 Y=Yes (20)49% N=No (10)24% NR/O=No Response/Other (11)27%

Question 7: Does your state have provisional certification for out-of-state teachers teaching within your state's borders?

STATE	YES	NO	NR/O	COMMENTS
Alabama	Y			
Arizona	Y			
Arkansas	Y			
California			NR	
Colorado	Y			
Connecticut	Y			
Delaware	Y			If they are teaching on a Delaware certificate in a Delaware system.
Florida		N		Issues a two-year nonrenewable Temporary Certificate. Out-of-state teacher normally could qualify for this certificate.
Georgia		N		
Hawaii		N		
Idaho		N		Can endorse out-of-state certificate under certain conditions.
Illinois	Y			
Indiana	Y			
Iowa			NR	
Kansas	Y			With limitations.
Louisiana	Y			
Maine	Y			
Maryland			NR	
Massachusetts			O	Issue addressed as the MCET network develops programming.
Mississippi		N		
Montana	Y			Must meet certain criteria.
Nebraska	Y			
Nevada	Y			
New Hampshire	Y			
New Mexico	Y			
New York	Y			
North Carolina	Y			
North Dakota		N		
Ohio	Y			
Oregon	Y			
South Carolina	Y			If applicant qualifies.
South Dakota		N		Limited certificate issued on receipt of out-of-state certificate.
Tennessee	Y			Under some circumstances.
Texas	Y			
Utah		N		
Vermont		N		States participating in compact are given initial licensing.
Virginia		N		
Washington		N		
Washington, D.C.	Y			
Wisconsin	Y			
Wyoming	Y			

N=41 Y=Yes (26)63% N=No (11)27% NR/O=No Response/Other (4)10%

Question 8: Would your state award provisional teacher certification for out-of-state teachers providing credit instruction through distance education systems within your state's borders?

STATE	YES	NO	NR/	OCOMMENTS
Alabama			O	Must seek Alabama certification.
Arizona	Y			
Arkansas			O	Certifiable through reciprocity.
California			NR	
Colorado		N		Districts can request a letter of authorization.
Connecticut		N		
Delaware		N		
Florida		N		An individual must be employed in a public school or nonpublic school with a Beginning Teacher Program for issuance of a certificate.
Georgia		N		Must be approved by state board.
Hawaii	Y			
Idaho	Y			Under consultant specialist or out-of-state endorsement.
Illinois	Y			
Indiana			O	Not necessary.
Iowa			NR	
Kansas		N		
Louisiana	Y			
Maryland			NR	
Maine			O	Issue currently under study.
Massachusetts			O	Issue addressed as the MCET network develops programming.
Mississippi			NR	
Montana			O	Montana accepts the out-of-state course if the teacher is certified in the field within Montana or state program originates.
Nebraska		N		
Nevada	Y			
New Hampshire			O	Not sure/untried.
New Mexico			O	Uncertain.
New York		N		
North Carolina	Y			
North Dakota		N		Policy being developed.
Ohio	Y			
Oregon	Y			Arrangements must be made through an Oregon institution.
South Carolina	Y			Regulations for temporary certification.
South Dakota		N		Issues limited SD certificate on receipt of out-of-state certificate.
Tennessee	Y			If requirements are met.
Texas	Y			
Utah	Y			Perhaps.
Vermont			NR	
Virginia			O	Must be considered.
Washington		N		
Washington, D.C.	Y			
Wisconsin		N		No decision, but likely no.
Wyoming	Y			

N=41 Y=Yes (15)37% N=No (12)29% NR/O=No Response/Other (14)34%

Question 9: Do you believe that the use of telecommunications/technology to provide education will facilitate a movement toward a national teacher certification process?

STATE	YES	NO	NR/O	COMMENTS
Alabama		N		
Arizona	Y			
Arkansas		N		
California			NR	
Colorado	Y			
Connecticut		N		
Delaware		N		It is a unique issue.
Florida		N		
Georgia	Y			
Hawaii	Y			
Idaho		N		
Illinois		N		
Indiana		N		
Iowa			NR	
Kansas		N		
Louisiana		N		
Maine	Y			
Maryland			NR	
Massachusetts			NR	
Mississippi	Y			
Montana		N		
Nebraska		N		
Nevada	Y			
New Hampshire	Y			
New Mexico			O	Don't know.
New York		N		
North Carolina	Y			
North Dakota			O	Don't know.
Ohio	Y			
Oregon			O	Doubtful.
South Carolina	Y			
South Dakota		N		
Tennessee			NR	
Texas	Y			
Utah	Y			
Vermont		N		
Virginia	Y			
Washington	Y			
Washington, D.C.		N		
Wisconsin		N		
Wyoming		N		

N=41 Y=Yes (15)37% N=No (18)44% NR/O=No Response/Other (8)19%

About the Author

Dr. England serves as a consultant to several organizations, state-level education agencies, colleges and universities in the area of distance education and education policy, and is the principal of a private school in Tennessee. He is the author of papers and articles which have been published nationally and internationally, and frequently serves as a guest lecturer on the topic of the impact of technology on education. He may be contacted at Jackson Christian School, 832 Country Club Lane, Jackson, Tennessee 38305.

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